# *FIG. 1*

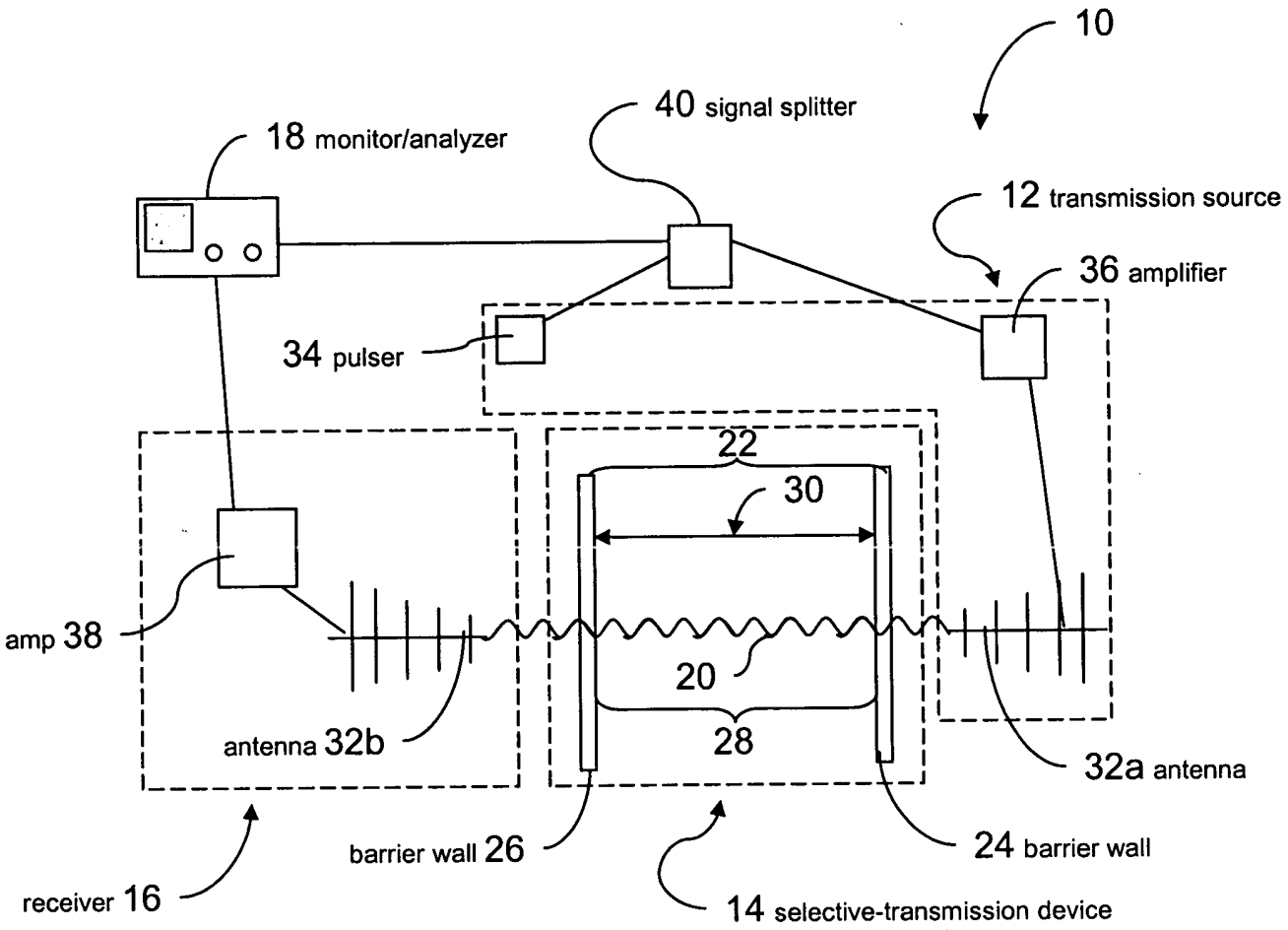

10
40 signal splitter
18 monitor/analyzer
12 transmission source
36 amplifier
34 pulser
22
30
amp 38
20
antenna 32b
28
32a antenna
barrier wall 26
24 barrier wall
receiver 16
14 selective-transmission device

*FIG. 2*

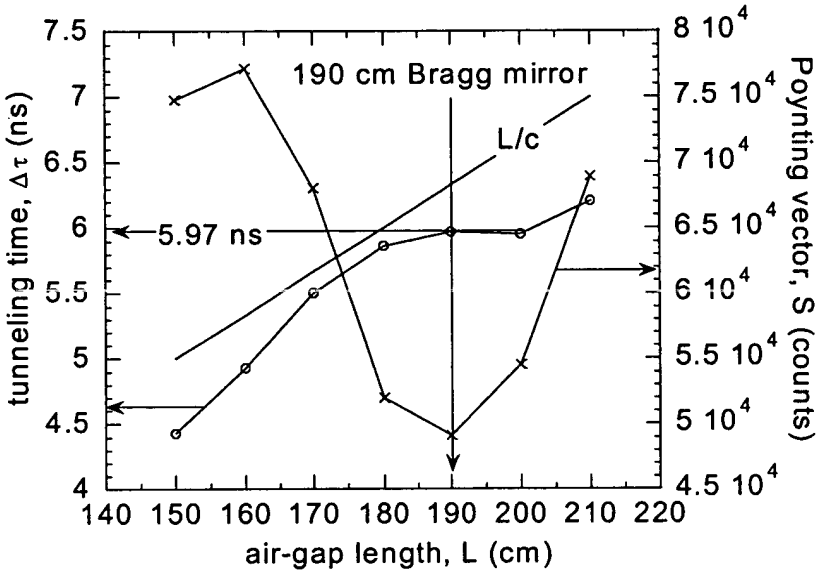
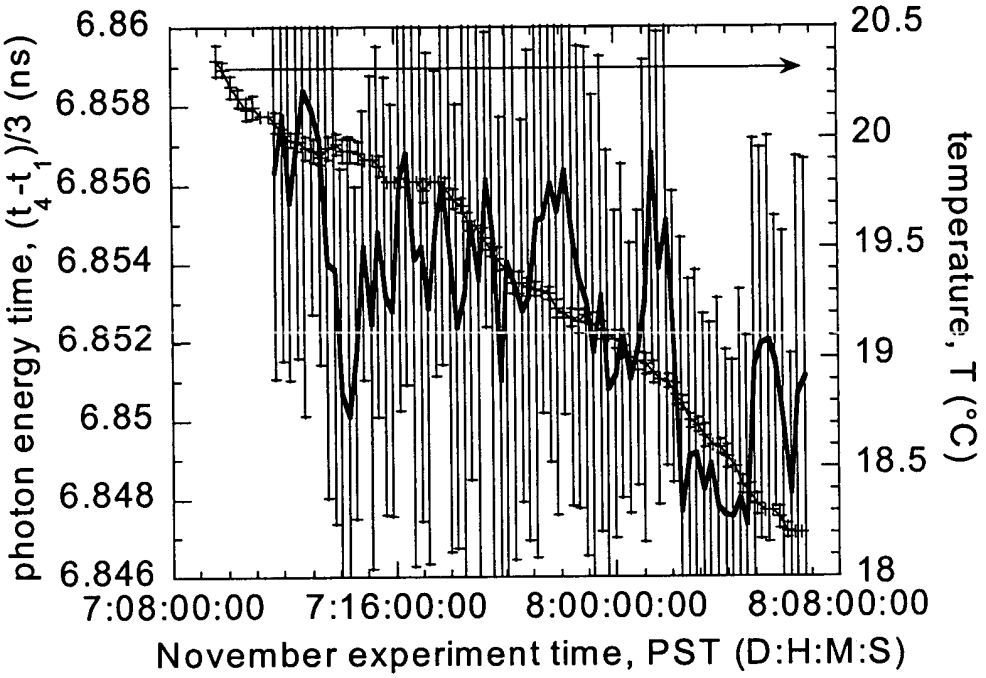

190 cm Bragg mirror
L/c
5.97 ns
tunneling time, Δτ (ns)
Poynting vector, S (counts)
air-gap length, L (cm)
7.5
7
6.5
6
5.5
5
4.5
4
8 10^4
7.5 10^4
7 10^4
6.5 10^4
6 10^4
5.5 10^4
5 10^4
4.5 10^4
140 150 160 170 180 190 200 210 220

*FIG. 3*


6.86
6.858
6.856
6.854
6.852
6.85
6.848
6.846
photon energy time, $(t_4 - t_1)/3$ (ns)
20.5
20
19.5
19
18.5
18
temperature, T (°C)
7:08:00:00
7:16:00:00
8:00:00:00
8:08:00:00
November experiment time, PST (D:H:M:S)

# *FIG. 4*

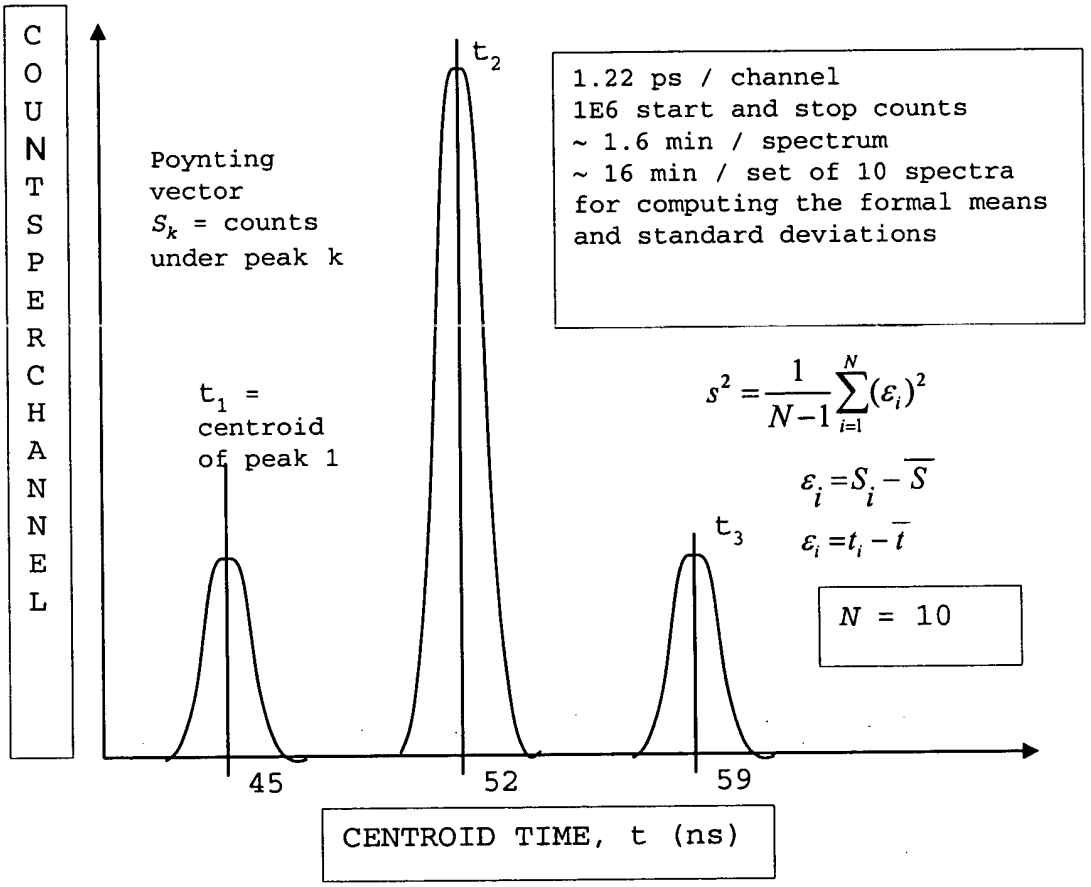

COUNTS PER CHANNEL
Poynting vector $S_k$ = counts under peak k
$t_1$ = centroid of peak 1
$t_2$
$t_3$
1.22 ps / channel
1E6 start and stop counts
~ 1.6 min / spectrum
~ 16 min / set of 10 spectra for computing the formal means and standard deviations
$s^2 = \frac{1}{N-1}\sum_{i=1}^{N}(\varepsilon_i)^2$
$\varepsilon_i = S_i - \overline{S}$
$\varepsilon_i = t_i - \overline{t}$
N = 10
45
52
59
CENTROID TIME, t (ns)

*FIG. 5*

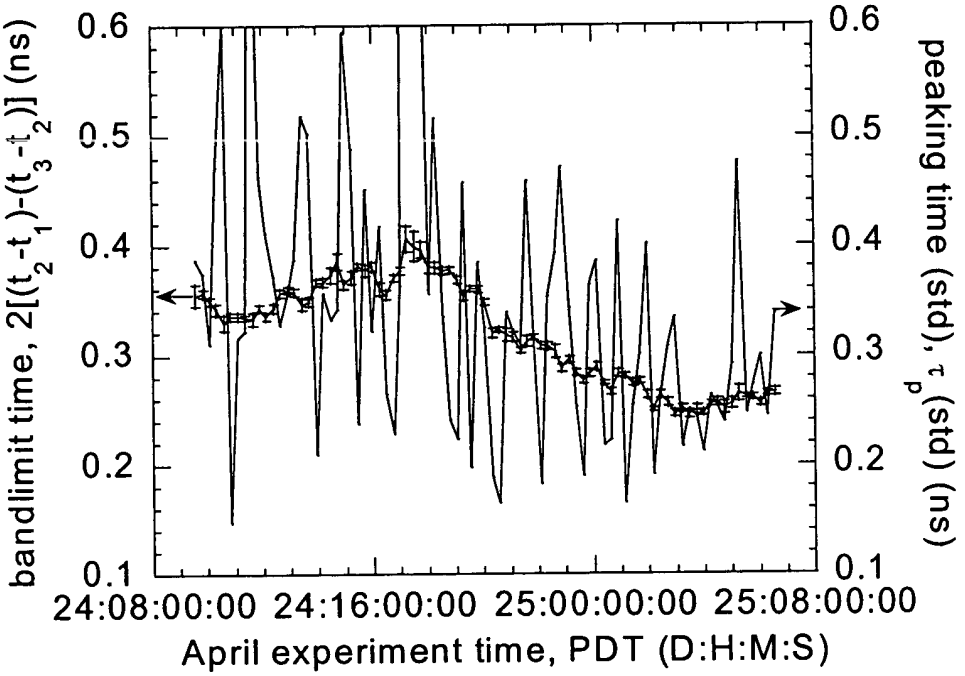

bandlimit time, 2[(t2-t1)-(t3-t2)] (ns)
peaking time (std), τp (std) (ns)
0.6
0.5
0.4
0.3
0.2
0.1
24:08:00:00
24:16:00:00
25:00:00:00
25:08:00:00
April experiment time, PDT (D:H:M:S)

*FIG. 6*

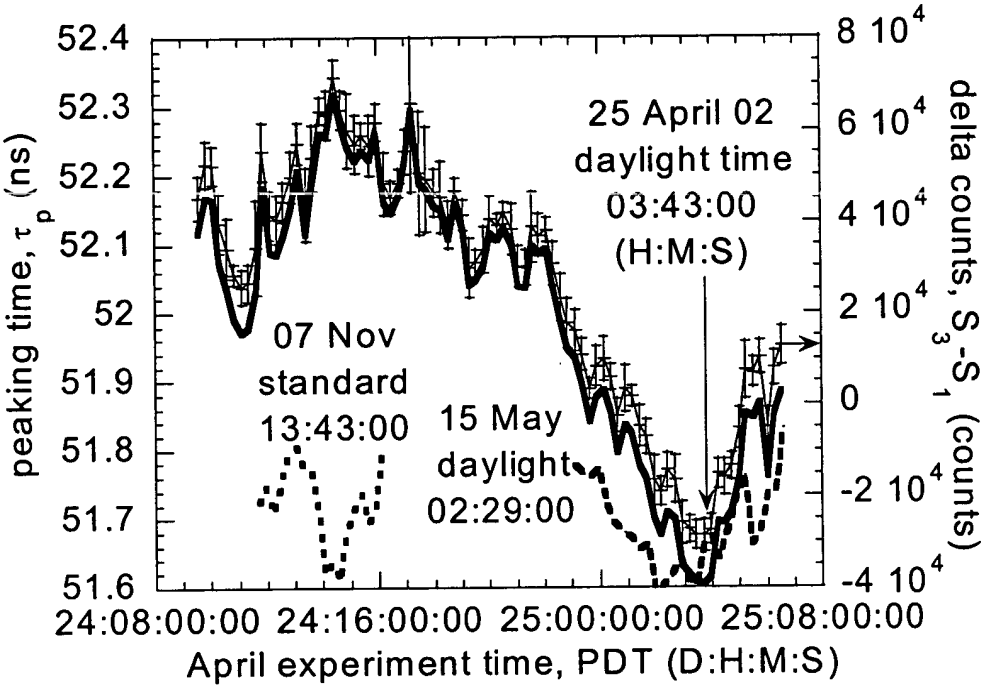

52.4
52.3
52.2
52.1
52
51.9
51.8
51.7
51.6
peaking time, $\tau_p$ (ns)
8 10^4
6 10^4
4 10^4
2 10^4
0
-2 10^4
-4 10^4
delta counts, $S_3$-$S_1$ (counts)
25 April 02
daylight time
03:43:00
(H:M:S)
07 Nov
standard
13:43:00
15 May
daylight
02:29:00
24:08:00:00
24:16:00:00
25:00:00:00
25:08:00:00
April experiment time, PDT (D:H:M:S)

*FIG. 7*

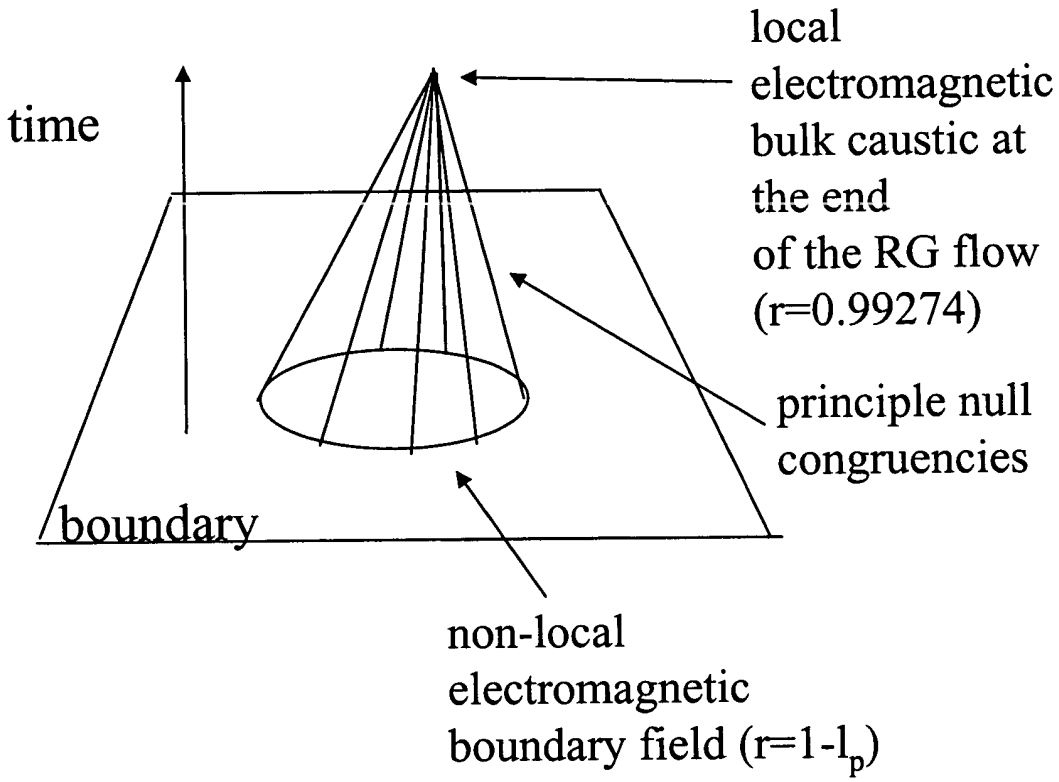

time
local electromagnetic bulk caustic at the end of the RG flow (r=0.99274)
principle null congruencies
boundary
non-local electromagnetic boundary field (r=1-$l_p$)

*FIG. 8*

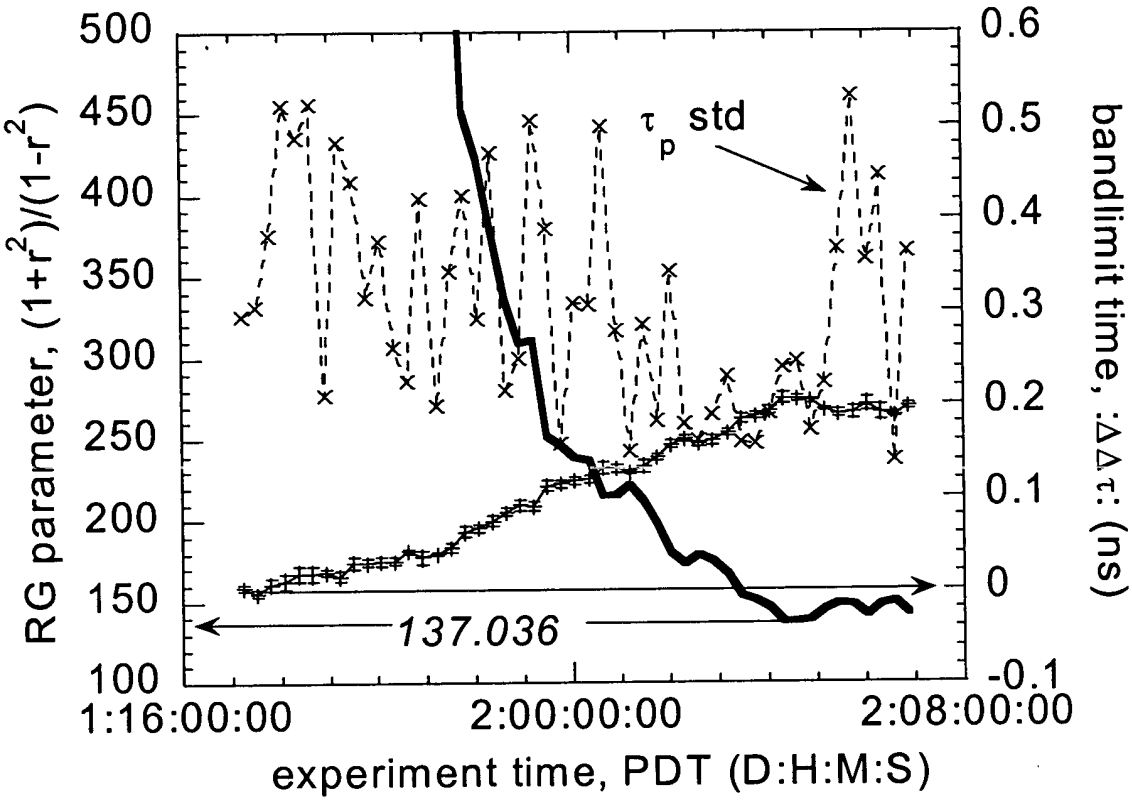
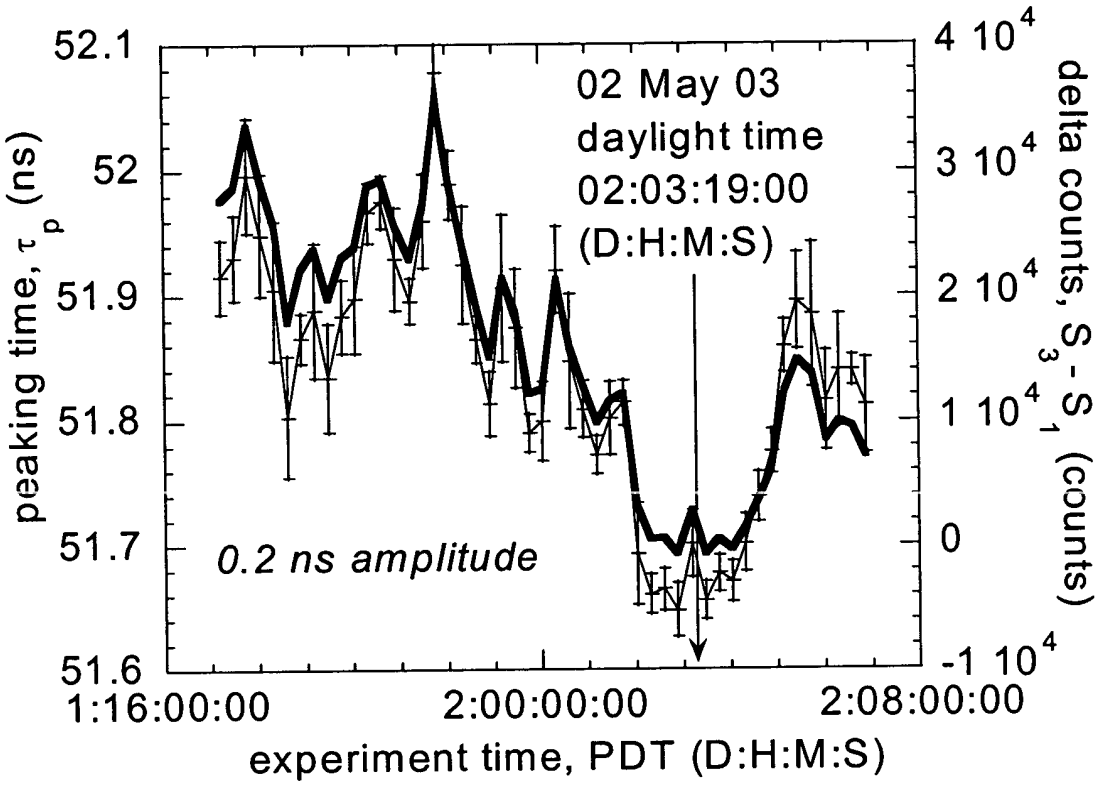

RG parameter, $(1+r^2)/(1-r^2)$
bandlimit time, $\Delta\Delta\tau$: (ns)
experiment time, PDT (D:H:M:S)
$\tau_p$ std
137.036
500
450
400
350
300
250
200
150
100
0.6
0.5
0.4
0.3
0.2
0.1
0
-0.1
1:16:00:00
2:00:00:00
2:08:00:00

*FIG. 9*


52.1
52
51.9
51.8
51.7
51.6
peaking time, $\tau_p$ (ns)
4 10^4
3 10^4
2 10^4
1 10^4
0
-1 10^4
delta counts, $S_3 - S_1$ (counts)
02 May 03
daylight time
02:03:19:00
(D:H:M:S)
0.2 ns amplitude
1:16:00:00
2:00:00:00
2:08:00:00
experiment time, PDT (D:H:M:S)